

## PATENT ABSTRACTS OF JAPAN

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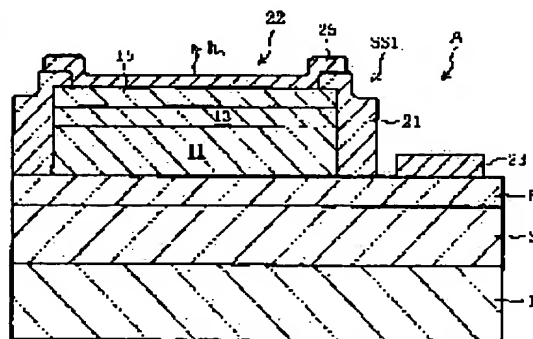
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## (54) OPTICAL SEMICONDUCTOR ELEMENT AND OPTICAL SEMICONDUCTOR DEVICE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To prevent positive holes from overflowing to an n type clad layer of an optical semiconductor element and to prevent the light guide-out efficiency from decreasing.

**SOLUTION:** This element includes an n type  $\text{Mg}_x\text{Zn}_{1-x}\text{O}$  clad layer 5, an  $\text{In}_y\text{Ga}_{1-y}\text{N}$  active layer 11 formed thereupon, a p type  $\text{Mg}_z\text{Zn}_{1-z}\text{O}$  clad layer 15 formed thereupon, a 1st electrode 23 which electrically forms a contact for the clad layer 5, and a 2nd electrode 25 which electrically forms a contact for the clad layer 15.



## LEGAL STATUS

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